

Corn Masa Flour

This blended, protein-fortified, processed commodity is designed for use in the preparation of tortillas and similar products or gruels to be consumed by both children and adults.

1. NUTRITIONAL VALUES (per 100 g)

These are average values, taken from the U.S. Department of Agriculture, Agricultural Research Service (USDA:ARS) 1998 USDA Nutrient Database, Release 12, Laboratory Home Page, (<http://www.nal.usda.gov/fnic/foodcomp>). These nutrient values are provided as a guide for use in the calculation of food aid rations; users should be aware that shipments of food aid may vary from these exact values. The values for thiamin, riboflavin, niacin, vitamin A, calcium and iron represent the minimum levels of enrichment nutrients (converted to a 100 g basis) as listed in Specifications below.

2. COMPONENTS

95% Corn Masa Flour:

Whole ground white or yellow corn, partially precooked in lime water, followed by washing, rinsing, grinding, and drying to produce the traditional flavor and performance characteristics suitable for preparation of a wide range of food staples in the form of arepas, corn cakes, corn chips, tortillas, enchiladas, or gruel.

5% Soy Flour: Defatted and toasted.

Vitamin and Mineral Enrichment

3. SPECIFICATIONS

(See Table next page.)

4. PACKAGING

25 kg (55lb.) bags of multi-wall paper. Three plies of paper (minimum) with an inner polyethylene or polypropylene plastic liner. The outer paper ply is treated to provide wet strength.

5. SHELF LIFE

At least one year. See "Section III: Storage/Shelf Life Specifications" for more information.

Nutrient	Amount	Unit
Water	9.0	g
Energy	365.0	Kcal
Protein	9.3	g
Total Lipid	3.8	g
Carbohydrate	76.3	g
Fiber, total dietary	n/a	g
Ash	1.6	g
Calcium	110	mg
Iron	3	mg
Magnesium	110.0	mg
Phosphorus	223.0	mg
Potassium	298.0	mg
Sodium	5.0	mg
Zinc	1.8	mg
Copper	0.2	mg
Manganese	0.5	mg
Selenium	n/a	mcg
Vitamin C	0.0	mg
Thiamin	0.44	mg
Riboflavin	0.26	mg
Niacin	3.53	mg
Pantothenic acid	0.7	mg
Vitamin B-6	0.4	mg
Folate	150	mcg
Vitamin B-12	0.0	mcg
Vitamin A	2205	IU
Vitamin E	n/a	mg-ATE
Vitamin D	n/a	IU
Iodine	n/a	mcg

CHEMICAL AND PHYSICAL REQUIREMENTS

ITEM	REQUIREMENT¹	
	Minimum	Maximum
Moisture, %	--	11.5
Protein, % ¹	11.0	--
Fat, % ¹	3.0	--
Ash, % ¹	--	2.5
Ph	6.7	8.0
Material through a U.S. Standard No. 30 woven-wire-cloth sieve, %	100	--
Material through a U.S. Standard No. 50 woven-wire-cloth sieve, %	85	--
Material through a U.S. Standard No. 100 woven-wire-cloth sieve, %	52	--
Dough Handling	Typical, Cohesive, Pliable	
Baked tortilla	Typical, No cracks	
Flavor	Typical, Lime-corn	
Total bacteria count, per gram	--	50,000

¹ Analyses are expressed on a moisture-free basis.

ENRICHMENT INGREDIENTS	Minimum	Maximum
Thiamine, mg/lb.	2.0	3.0
Riboflavin, mg/lb.	1.2	1.8
Niacin or niacinamide, mg/lb	16.0	24.0
Iron (reduced iron, 325 mesh to be used as the iron source), mg/lb.	13.0	26.0
Vitamin A Palmitate, IU/lb.	10,000	12,000
Calcium (in harmless and assimilable form), mg/lb.	500	1,000

(Source: USDA:FSA:PDD:EOB January 16, 1998. Contact 202-690-3565;
MF7: PURCHASE OF INSTANT CORN-SOY MASA FLOUR FOR USE IN EXPORT PROGRAMS –
SPECIFICATIONS)